

U. S. F. C.  
Records.

Nos. 858-901.

1880.

ORIGINAL LOG BOOK OF THE "FISH HAWK"

UNITED STATES FISH COMMISSION

STATION RECORDS

Numbers 858 to 901

Copy.

P.

U. S. Fish Commission.  
Dredging Record.  
1880.

Locs. 858 to  
Sept. 1 to

All bearings in this  
book are magnetic

Air temperatures taken  
by a Gal. Green Thermometer  
supplied by the Navy  
Department, and corrected  
within .5° of adeg. It was  
placed in the open  
pilot-house

# Chester Rake dredge.

## TEMPERATURE RECORD.

Instrument used, Negretti-Zambra.

Current number of observation, 858.

Date, Sept. 1, 1880.

Locality, Narragansett Bay

Bearings, Beaver Tail Pt., N. N. W.  
1/4 W., 1/3 mile.

Time of day, 1.05 P.M.; of tide, flood.

State of sky, clear.

Temperature of air, 69.

" surface of water, 63. (N.Z. 42666

" at depth of 10 fathoms, 66.5 (N.Z. 40007)

" of bottom, 66. (N.Z. 40007).

Depth, in fathoms, 14.

Nature of bottom, Shelly.

Direction of ~~surface~~ current, S. E.

Force of ~~surface~~ " drift 2.

Direction of ~~bottom~~ current, E.

Force of ~~bottom~~ current, 1/4 mile.

Name of vessel, Fresh Hawk.

To what service attached, U. S. F. C.

Name and rank of commanding officer, Z. A. Tanner.

Lieut., U. S. N.

Name and position of observer, F. C. Van Vleet.

M.D.

**REMARKS.**

Coarse sand, broken shells,  
*Cancer borealis.*

Chesapeake Bay  
TEMPERATURE RECORD.

Instrument used, Negretti-Zambra

Current number of observation, 859.

Date, Sept. 3, 1880.

Locality, Vineyard Ad.

Bearings, Cullerhunk light, N.  $\frac{1}{2}$  W.,  
3 miles.

Time of day, 11.20 a.m.; of tide,

State of sky, Clear.

Temperature of air,  $68^{\circ}$

" surface of water, 66. (N. 3. 46400.)

" at depth of 5 fathoms, 65. (N. 3. 40000 f.)

" of bottom, 63. "

Depth, in fathoms,  $17\frac{1}{2}$

Nature of bottom, sand.

Direction of surface current, S. W.

Force of surface current, 2.

Direction of bottom current, W.

Force of bottom current,  $\frac{1}{4}$  mile.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

**REMARKS.**

Net caught over rocks  
Nothing in bags but on rocks  
Minnows  
*Minnow* *negripinnis*?  
*Phoxinus coloradensis*?  
and in pieces of broken  
pot brought up large  
specimens of *Minnow*

Chesapeake Bay  
TEMPERATURE RECORD.

Instrument used, *Regrettii Zambra*

Current number of observation, 860.

Date, Sept. 3, 1880.

Locality, Vineyard Sound.

Bearings, Pullyhunk St., N. 1/2 W.  
3 miles.

Time of day, 11.55 a.m.; of tide,

State of sky, clear,

Temperature of air, 70.

" surface of water, 66. (n. 3.46400)

" at depth of 5 fathoms, 65° (n. 3.40007)

" of bottom, 64. "

Depth, in fathoms, 17 1/2

Nature of bottom, mud.

Direction of surface current, S. W.

Force of surface current, 2,

Direction of bottom current, W.

Force of bottom current, 1/4 m.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

## REMARKS.

Bay nearly full, fine sand,  
slight ~~amount~~<sup>very</sup> of mud,  
very rich in annelids and  
amphipods, and Mollusks

*Merluccius bilinearis*

Frank  
TEMPERATURE RECORD.

Instrument used, Negretti-Zambra

Current number of observation, 861.

Date, Sept. 3<sup>rd</sup>, 1880

Locality, Vineyard Is.

Bearings, Cuttyhunk Is., N. 3/4 W.,  
3 3/4 miles.

Time of day, 12, 20 P.M.; of tide,

State of sky, clear.

Temperature of air, 69.

n.z. " surface of water, 66. (n.z. 46400.  
40007 " at depth of 5 fathoms, 65. (10 f. - 65°  
" of bottom, 61. (n.z. 40007.

Depth, in fathoms, 17.

Nature of bottom, sand.

Direction of wind surface current, S. W.

Force of surface current, 2.  
" drift, 3.

Direction of bottom current, S.

Force of bottom current, 44 miles.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

861.

**REMARKS.**

*Suberites compacta* ?  
*Loligo Realis*  
*Hondurus americanus*,  
*Halocynthia vulgaris*  
*Phidaria tenuicostata*,  
*Empodium bernardus*,  
*Platywhirus ocellatus*,  
*Callicepa borealis*  
" *litoralis*  
*Pinnotheres maculatus* *l. Pecten*

202

# TEMPERATURE RECORD.

Instrument used,

*Regrettéi-Zambla*

Current number of observation, 862.

Date, Sept. 3<sup>o</sup> 1880.

Locality, Vineyard Sound.

Bearings, Cuttyhunk Light.  
North, 4 miles.

Time of day, 12.55 P.M.; of tide,

State of sky, Clear.

Temperature of air, 68.

" surface of water, 66. (N.Z. 46400

" at depth of 5 fathoms, 65. (N.Z. 4005 f.

" of bottom, 64 "

Depth, in fathoms, 17.

Nature of bottom, sand.

Direction of surface current, S. W.

Force of surface current, 2.

Direction of bottom current, S.

Force of bottom current, 1/4 m.

Name of vessel.

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

862

**REMARKS.**

*Platyoniella occidentalis*

*Euphorbiae shankardii*

*Carex borealis*

*Hornemannia longistylis*

*Lolium perenne*

*Cichorium intybus* (?)  
only a few fragments, above

*Actinella uncinis*, (?)

*Succowia compacta*?

Water Temp.  
TEMPERATURE RECORD.

Instrument used, Regretté-Zambla.

Current number of observation, 863,

Date, Sept. 3, 1880.

Locality, Vineyard Is.

Bearings, Culeythunk Lt., N. 48 E.

3 3/4 miles.

Time of day, 1.40 P.M.; of tide, flood.

State of sky, clear

Temperature of air, 70.

N.B. 4000 f. surface of water, 67. (N.B. 42600.)  
4000 f. at depth of 10 fathoms, 65° (5 f. 65°)  
" of bottom, 65 (N.B. 4000 f.)

Depth, in fathoms, 18.

Nature of bottom, sand.

Direction of surface current, S. W.

Force of surface current, 2.

Direction of bottom current, S.

Force of bottom current, 1/4 mile.

Name of vessel,

To what service attached.

Name and rank of commanding officer,

Name and position of observer,

863  
**REMARKS.**

Same as 862, very rich  
*Goldia linearis*, very large.

2  
TEMPERATURE RECORD.

Instrument used, Negretti-Zambra

Current number of observation, 864.

Date, Sept. 3, 1880.

Locality, Vineyard Is.

Bearings, Gay Head Is., S. S. W.  $\frac{7}{8}$  N.  
5  $\frac{1}{2}$  miles.

Time of day, 3 P.M.; of tide, flood.

State of sky, clear.

Temperature of air, 70.

" surface of water, 67. (n. 3.46400

" at depth of 5 fathoms, 66. (n. 3.40007

" of bottom, 65. "

Depth, in fathoms, 13.

Nature of bottom, sand.

Direction of surface current, S. W.

Force of surface current, 2.

Direction of bottom current, S.

Force of bottom current, 1/4 m.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

864.

**REMARKS.**

Sand and broken shells

Y.F.A.  
TEMPERATURE RECORD.

Instrument used, Negretti-Zambra.

Current number of observation, 865.

Date, Sept. 4, 1880.

Locality, Atlantic.

Bearings, Lat.  $40^{\circ} 05' N$ ,

Long.  $70^{\circ} 23' W$ .

Time of day, 5.40 a.m.; of tide,

State of sky, Clear.

Temperature of air, 71.

" surface of water, 73. (N.B. 46400)

" at depth of 5 fathoms, 75. (N.B. 46401.)

" of bottom, 68.5 (N.B. 46401.)

Depth, in fathoms, 65.

Nature of bottom, Compact fine sandstone.

Direction of ~~surface current~~, wind.

Force of ~~surface current~~, 1.

Direction of ~~bottom current~~, drift.

Force of ~~bottom current~~, " E. N. E.

Distance,  $\frac{1}{2}$  mile.

Name of vessel.

To what service attached.

Name and rank of commanding officer,

Name and position of observer,

## REMARKS.

do not last, and requires frequent adjustment, by varying the flame, by varying the pressure, by varying the air, by varying the water.

*Peristedium*: from spec.

A heavy swell, the ship rolling violently at times.

The Negretti-Zambra thermometers are not reliable for bottom and intermediate temperatures, frequently being capsizeed by rolling of the ship.

J. D. Tanner.

# TEMPERATURE RECORD.

Instrument used, *Regrett's Zambra*  
Current number of observation, *866.*

Date, *Sept. 4. 1880.*

Locality, *Atlantic*

Bearings, *Lat.  $40^{\circ} 05' 18''$  N.,  
Long.  $70^{\circ} 22' 18''$  W.*

Time of day, *6.30 a.m.*; of tide,

State of sky, *Clear.*

Temperature of air, *73.*

" surface of water, *73.* *n. 3.46400*

" at depth of *5* fathoms, *74.5.* (*n. 3.46401*)

" of bottom, *68.5 (?)* "

Depth, in fathoms, *65.*

Nature of bottom, *fine sand & mud.*

Direction of surface current, *Var.*

Force of surface current, *1. - 0.*

Direction of bottom current, *N. E. by E.*

Force of bottom current, *1. - 0.*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer, *Dr. F. C. Venable*

## REMARKS.

# Rough Temperature

## TEMPERATURE RECORD.

Instrument used.

Reggeli-Zambra

Current number of observation.

867.

Date, Sept. 4, 1880.

Locality, Atlantic

Bearings, Lat.  $40^{\circ} 05' 42''$  N.

Long.  $70^{\circ} 22' 06''$  W.

Time of day, 7.04 a.m. : of tide.

State of sky, clear.

Temperature of air, 75.

" surface of water, 73. (n. 3  $46^{\circ} 40'$ .)

" at depth of 5 fathoms, 75° (n. 3.  $46^{\circ} 40'$ .)

" of bottom, 53° (n. 3.  $46^{\circ} 40'$ .)

Depth, in fathoms, 64.

Nature of bottom, sand and mud.

Direction of ~~surface~~ current, wind.

Force of surface current,

Direction of ~~bottom~~ current, drift.

Force of current, 3/4 mile.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

J. L. Tammie

86 7/1

**REMARKS.**

Compound hard  
Solenites broken shells,

*Friend*  
TEMPERATURE RECORD.

Instrument used *Regretté Faunbra-*

Current number of observation *868.*

Date, *Sept. 4, 1880.*

Locality, *Atlantic*

Bearings, *Lat.  $40^{\circ} 01' 42''$  N.*

*Long.  $70^{\circ} 22' 30''$  W.*

Time of day, *8.23 a.m.*; of tide,

State of sky, *Clear.*

Temperature of air, *75.*

" surface of water, *75°* (*N.B. 46400.*)

" at depth of *5* fathoms, *75.* (*N.B. 46401.*)

" of bottom, *47.*

"

Depth, in fathoms, *162.*

Nature of bottom, *Fine sand & black specks.*

Direction of *Wind*, *Calm.*

Force of surface current,

Direction of *surface current*, *W. W.*

Force of *surface current*, *34 f. per sec.*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer, *J. D. Tamm.*

**REMARKS.**

7000-16000 feet, probably  
derived from boulders  
of <sup>granite</sup> ~~igneous~~? from inter-  
valley drift.

# Trawl

## TEMPERATURE RECORD.

Instrument used, Regretté-Zambla.

Current number of observation, 8691.

Date, Sept. 4, 1880.

Locality, Atlantic

Bearings, Lat.  $40^{\circ} 02' 18''$  N.

Long.  $70^{\circ} 23' 06$ . W.

Time of day, 9.27 a.m.; of tide,

State of sky, Clear,

Temperature of air, 80.

surface of water, 76. (n. 3. 46400.

at depth of 5 fathoms, 75° (n. 3. 46401.

of bottom, 50 (?) "

Depth, in fathoms, 192.

Nature of bottom, fine sand.

Direction of surface current, calm

Force of surface current.

Direction of bottom current, N. N. E.

Force of bottom current, 74 m/s.

Name of vessel,

To what service attached.

Name and rank of commanding officer,

Name and position of observer,

J. L. Tanner

869.

**REMARKS.**

Very wet & h.  
Very dry in the gullies

870. Fr. and

TEMPERATURE RECORD.

Instrument used,

Regatte Zambla.

Current number of observation, 870.

Date, Sept. 4, 1880.

Locality, Atlantic.

Bearings, Lat.  $40^{\circ} 02' 36''$  N,  
Long.  $70^{\circ} 22' 58''$  W.

Time of day, 10, 50 a.m.; of tide,

State of sky, Clear.

Temperature of air, 80.

" surface of water, 77 (n.z. 46400).

" at depth of 5 fathoms, 75. (n.z. 46407).

" of bottom, No obs.

Depth, in fathoms, 155.

Nature of bottom, mud and fine sand.

Direction of wind, Calm

Force of surface current,

Direction of surf, N. by E.  
Dist. 1 mile.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

J. L. Tanner

870.

**REMARKS.**

Very well off with 1000

TEMPERATURE RECORD.

Instrument used Negretti-Zambra.

Current number of observation, 871.

Date, Sept. 4, 1880.

Locality, Atlantic <sup>lon.</sup>

Bearings - Lat.  $40^{\circ} 02' 54''$  N. } Lat.  $70^{\circ} 23' 40''$  N.  
(Lat. merid. obs.  $40^{\circ} 04' 57''$  N.)

Time of day, 11.40 a.m.; of tide,

State of sky, Clear.

Temperature of air, 84

$n_3, 46401 \}$  surface of water, 76.5 (n<sub>3</sub>, 46400)  
at depth of 5 fathoms, 75. (108.75°)  
of bottom, 49. (n<sub>3</sub>, 46401)

Depth, in fathoms, 115.

Nature of bottom, sand & fine 2 and.

wind Calm.

Force of ~~surface~~ current, "

Direction of bottom current, N. N. N.

Force of bottom current,  $3/4$  mile.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer, J. d. Tanner

~~S 71~~  
**REMARKS.**

Travel.  
TEMPERATURE RECORD.

Instrument used Negretti-Zambra

Current number of observation, 872.

Date, Sept. 4, 1880.

Locality, Ottastic.

Position, Lat.  $40^{\circ} 05' 39'' N$

Long.  $70^{\circ} 23' 52'' W.$

Time of day, 12.45 P.M. of tide,

State of sky, Partially clear.

Temperature of air, 81.

Temperature of surface of water, 77 (N.B. 46400.)

Temperature at depth of 5 fathoms. 75. (N.B. 46407.)

Temperature of bottom, 50.5. "

Depth, in fathoms, 86.

Nature of bottom, sand, gravel, shells, sponge,

mineral. Smooth.

Force of surface current, 1.

Direction of surface current, North by E.

Force of bottom current, 1/2 mile

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

J. A. Smith.

72  
REMARKS.

55

# TEMPERATURE RECORD.

Instrument used, Negretti-Zambra

Current number of observation, 873.

Date, Sept. 13, 1880.

Locality, Atlaſtic.

Bearings, Lat.  $40^{\circ}02' N.$

Long.  $70^{\circ}05' W$

Time of day, 5.36 a.m.; of tide,

State of sky, clear.

Temperature of air, 68.

" surface of water, 69.5 (n.z. 46404)  
46400. at depth of 5 fathoms,  $70^{\circ}$  (10 f. 70°)  
" of bottom, 51. n.z. 46400.

Depth, in fathoms, 100.

Nature of bottom, sand.

Direction of surface current, S. W.

Force of surface current, 3.

Direction of ~~bottom current~~ drift, N. W. by N.

Force of bottom current,  $\frac{1}{2}$  mile.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

## REMARKS.

Aug. 874. I found the following  
and very interesting  
material in the plant,  
and which I have had  
time to identify. The  
list of the plants  
found will follow in due  
time when we are found.

S. 1000

## TEMPERATURE RECORD.

Instrument used, *Reggeli Zambra*

Current number of observation, 874.

Date, Sept. 13, 1887.

Locality, *Atlantic*

Bearings, Lat.  $40^{\circ}$  N.

Long.  $70^{\circ} 57' W.$

Time of day, 6. 26 a.m.; of tide,

State of sky, *clear*

Temperature of air,  $70^{\circ}$

" surface of water,  $70$  ( $n. 9.46404$ ).

~~40 fms.~~ at depth of  $5$  fathoms,  $70.5^{\circ}$  ( $108.70^{\circ}$ ) X

" of bottom,  $51.$  ( $n. 9.46400$ )

Depth, in fathoms,  $85.$

Nature of bottom,  *mud.*

Direction of surface current, *S. W.*

Force of surface current, *2.*

Direction of bottom current, *N. W.*

Force of bottom current, *1/2 mile.*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

$287.64^{\circ} - 427.55^{\circ}$

REMARKS.

# TEMPERATURE RECORD.

Instrument used. *Regrettie Zambra*  
*875.*

Current number of observation,

Date, *Sept. 13, 1850.*

Locality, *Atlantic.*

Bearings, *Lat.  $39^{\circ} 57' N.$*

*Long.  $70^{\circ} 57' 20'' W.$*

Time of day, *7.51 a.m.* : of tide,

State of sky, *clear.*

Temperature of air, *70.*

*n<sub>3</sub>*, " surface of water, *70.* *n. 3. 46404.*  
*46400.* " at depth of *5* fathoms, *71° (10f. 70° X*  
" of bottom, *53.* *n. 3. 46400.*

Depth, in fathoms, *126.*

Nature of bottom, *sand.*

Direction of ~~surface current~~, *S. W.*

Force of ~~surface current~~, *2.*

Direction of ~~bottom current~~, *N. E.*

*0.5 f.* " *1/2 mile*

Name of vessel.

To what service attached.

Name and rank of commanding officer,

Name and position of observer,

*20f. 69° - 30f. 54°*

## REMARKS.

## Travel

## TEMPERATURE RECORD.

Instrument used, Negretti-Zambra

Current number of observation, 876.

Date, Sept. 10, 1880.

Locality, Atlantic.

Bearings, Lat.  $39^{\circ} 57' N.$ Long.  $70^{\circ} 56' W.$ 

Time of day, 8.45 a.m.; of tide,

State of sky, clear.

Temperature of air, 68

$n_3$ 46400.	surface of water,	70.	(n <sub>3</sub> . 46404)
"	at depth of 5 fathoms,	71.	(10 f. 70° x)
"	of bottom; 58.		n <sub>3</sub> . 46400.

Depth, in fathoms, 120.

Nature of bottom, sand.

Direction of surface current, S. W.

Force of surface current, 2.

Direction of bottom current, N.

Distance, " 24 miles.

Name of vessel,

To what service attached.

Name and rank of commanding officer,

Name and position of observer,

$$^* 2 \text{ of. } 69^{\circ} = 30 \text{ f. } 54^{\circ}$$

## **REMARKS.**

Tracey  
TEMPERATURE RECORD.

Instrument used. *Regulus Zambra.*

Current number of observation. 877.

Date. Sept. 13. 1880.

Locality. *Albanie.*

Latitude. Lat.  $39^{\circ} 56' N.$

Bearings. Long.  $70^{\circ} 05' 18'' W.$

Time of day, 9.40 a.m.; of tide,

State of sky, *clear.*

Temperature of air, 71.

n. 3, 46400. " surface of water, 71. (n. 3, 46404.  
" at depth of 5 fathoms,  $78^{\circ}$  (107.70°  
" of bottom, 57. n. 3, 46400.

Depth, in fathoms, 126.

Nature of bottom, *sand.*

Direction of surface current, S. N.

Force of surface current, 2.  
" *Twif-*

Direction of bottom current, n. N. W.

Force of bottom current,  $\frac{3}{4}$  m.

Name of vessel.

To what service attached.

Name and rank of commanding officer,

Name and position of observer,

## REMARKS.

*Trawl*  
TEMPERATURE RECORD.

Instrument used, *negretti-zambra and miller-cazecca.*

Current number of observation, *878.*

Date, *Sept., 13, 1880.*

Locality, *Atlan-tec.*

Bearings, *Lat.  $39^{\circ} 55' N.$*

*Long.  $70^{\circ} 54' 15'' W.$*

Time of day, *11 a.m.*; of tide,

State of sky, *cloudy.*

Temperature of air, *72.*

" surface of water, *71.* *(N.3.46404,*

" at depth of *5* fathoms *N.3.70*  $\frac{1}{2}$  *of N.3.70, X*  
*M.C. 66.3*  $\frac{1}{2}$  *of M.C. 70.*

" of bottom, *52.* *N.3.46400,*

*48. M.C.*

Depth, in fathoms, *142 1/2*

Nature of bottom, *sand.*

Direction of surface current, *S. W.*

Force of surface current, *2*

Direction of rip current, *E. N. W.*

Force of bottom current, *3/4 m.*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

*X 20f N.3.55.*  
*20f M.C. 55*

## **REMARKS.**

Trawl  
TEMPERATURE RECORD.

Instrument used,

Negretti Zambra and  
Miller Casella

Current number of observation, 879,

Date, Sept. 13, 1880.

Locality, Atlantic.

Bearings, Lat.  $39^{\circ} 04' 9''$  N,  
Long.  $70^{\circ} 05' 4''$  W.

Time of day, 1.20 P.M.; of tide,

State of sky, Cloudy.

Temperature of air, 73.

" surface of water, 71.5. 123. 46404.  
" at depth of 5 fathoms, 71.5. 123. 68 { 10 n.c. 70 x  
" of bottom, 71.5. 42. n.c. 42

Depth, in fathoms, 225

Nature of bottom, sand & blue mud.

Direction of wind, S. W.

Force of surface current, 3.

Direction of current, N. by N.,

Force of bottom current,  $\frac{3}{4}$  m.

Name of vessel.

To what service attached.

Name and rank of commanding officer,

Name and position of observer,

\* 20 f. n.c. 70.  
m.c. 70.

879.

**REMARKS.**

Large granular & fine  
brown tubes.

Blackish brown

Urticularia ~~Crinodendron~~ 7

*Trawl*  
TEMPERATURE RECORD.

Instrument used, *Nicca Casella*,  
Current number of observation, *880*.

Date, *Sept. 13, 1880.*

Locality, *Atlantic*

Bearings, *Lat.  $39^{\circ} 48' 3''$  N.*  
*Lng.  $70^{\circ} 54' 2''$*

Time of day, *3.12 P.M.*; of tide, *Low*.

State of sky, *Cloudy.*

Temperature of air, *74.*

" surface of water, *71.5* (*23.46402*)

" at depth of *5* fathoms, *74.1*  $\{$  *10* *72*  
*23.4683*  $\}$  *23.46402*

" of bottom, *43.5*  $\{$  *82.5* *46.402*

Depth, in fathoms, *252 1/2*

Nature of bottom, *Gravel*

Direction of surface current, *S. W.*

Force of surface current, *3*

Direction of bottom current, *W. by N.*

Force of bottom current, *3/4* *W.*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

580.

**REMARKS.**

very Rich. Large quantities  
of *Camella* and very  
handsome.

Bolocan. Fine stone.  
The stone is very fine  
and the country is very  
handsome.

French,  
TEMPERATURE RECORD.

Regatta Yacht Club

Instrument used, ~~Thermometer~~ ~~Thermometer~~

Current number of observation, 881.

Date, Sept. 13, 1850.

Locality, Atlantic

Bearings, Lat.  $37^{\circ} 47'$  N. Long.  $30^{\circ} 30'$  W.

Time of day, 5 P.M.; of tide,

State of sky, Cloudy.

Temperature of air, 70.

" surface of water,  $71^{\circ} 76.3$ , 4.6 f. 4.3

" at depth of 5 fathoms,  $71^{\circ} 66.3$  of.  $71^{\circ} 5$

" of bottom,  $71^{\circ} 42.2$   
 $71^{\circ} 41.$

Depth, in fathoms, 32.5.

Nature of bottom,

Direction of ~~surface current~~, S. E.

Force of ~~surface current~~, 3

Direction of ~~bottom current~~, N. E.

Force of ~~bottom current~~, 1

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

## REMARKS.

First found, and the hills  
came up.

Macmillan.

Archaeopter? sp.

Mikado octopus.

Matsumura new? sp.

Woolly tick region.

Apennines.

Jan.

TEMPERATURE RECORD.

Instrument used.

~~88~~ Negretti Zambra

Current number of observation,

882

Date, Sept. 17, 1880.

Locality, Narragansett Bay

Bearings, ~~about~~ N. N. E.  $\frac{1}{2}$  E.  
2  $\frac{3}{8}$  miles.

Time of day, 10.56<sup>A</sup>; of tide,

State of sky, ~~clear~~.

Temperature of air, 68,

" surface of water, 65° (11.3, 46.402)

" at depth of fathoms,

" of bottom, 67. (11.3, 46.402)

Depth, in fathoms, 12  $\frac{1}{2}$

Nature of bottom, mud.

Direction of ~~surface current~~, wind S. W.

Force of ~~surface current~~, " 2.

Direction of ~~bottom current~~, drift, S. W.

Force of ~~bottom current~~, "  $\frac{1}{4}$  mile

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

**REMARKS.**

*Frank*

## TEMPERATURE RECORD.

Instrument used, Negretti-Zambra

Current number of observation, 883.

Date, Sept. 17.

Locality, Narragansett Bay.

Bearings, Halfway Rock N. E. by N.,  $2\frac{1}{4}$  miles.

Time of day, 11, 35 <sup>am</sup>; of tide,

State of sky, clear.

Temperature of air, 70

" surface of water, 65 (N. 3,46452)

" at depth of fathoms,

" of bottom, 63 $\frac{1}{2}$  (N. 3,46400)

Depth, in fathoms, 13.

Nature of bottom, mud.

Direction of surface current, wind S. W.

Force of surface current, " 2.

Direction of bottom current, S. W.

Force of bottom current, 12 m.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

65 (v)

## REMARKS.

Abou same "Chouf" about 8 a.m.  
Hornbills Ameracaetus  
" " "  
Spoonbills  
Goliath Heron  
Limpkin *Yerpes*

# Chester Harbor Dredge

## TEMPERATURE RECORD.

Instrument used, Register thermometer 884.

Current number of observation, 1.

Date, Feb. 17, 1870.

Locality, Narragansett Bay.  
Hope J., N. E. 12° E.  
Bearings, 20° 30' aaz 30'.

Time of day, 2.10 P.M.; of tide, High.

State of sky, Clear.

Temperature of air, 72

" surface of water, 65, (N.z. 46402)

" at depth of fathoms, 63.5 (N.z. 46400)

" of bottom,

Depth, in fathoms, 5.

Nature of bottom, mud

Direction of surface current, wind, S. W.

Force of surface current, " 3.

Direction of bottom current, drift S. W.

Force of bottom current, " 1/4 m.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

## **REMARKS.**

Off the French  
TEMPERATURE RECORD.

Instrument used, Negretti Zambra

Current number of observation, 885

Date, Sept. 17, 1880.

Locality, Nancapamette Bay.

Bearings, Gouet's I. N. by E.  $3\frac{1}{4}$  E.,  
1  $\frac{3}{8}$  mile.

Time of day, 3, 15 P.M.; of tide,

State of sky, Clear.

Temperature of air, 71. (N.Z. 46402)

" surface of water, 69.

" at depth of 5 fathoms, 64 (N.Z. 46400)

" of bottom, 65 "

Depth, in fathoms, 16.

Nature of bottom, mud & shells.

Direction of surface-current, wind S. W.

Force of surface-current, " 2.

Direction of bottom-current, drift S.

Force of bottom-current, " 1/4 m.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

## **REMARKS.**

Dredge

TEMPERATURE RECORD.

Instrument used, *Reichert* thermometer

Current number of observation, 88

Date, Sept. 3.

Locality, off Rock 3

Bearings, South of Block Is. N. E 47°  
5 3/4 miles.

Time of day, 12.49 P.M. of tide.

State of sky, clear.

Temperature of air, 60  $\frac{7}{9}$ .

" surface of water, 64 (12.3, 46.402

" at depth of 6 fathoms, 62 (12.3, 46.400

" of bottom, 62, " "

Depth, in fathoms, 19.

Nature of bottom, Shells.

Direction of surface current, wind. 10.0.

Force of surface current, " 2.

Direction of bottom current, drift. N.  
2.0 ft.

Force of bottom current, " 1/4 m.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

S. 2. 2. 2. 2.

**REMARKS.**

Spotted, dark brown,  
darker.

Black stripe  
through eye.

Travel.

## TEMPERATURE RECORD.

Instrument used. *Refractile Thermometer*

Current number of observation. 887.

Date, Sept. 21

Locality, Off 1360 abt. S.

Bearings, South Right, Block S. 11.92 M.  
6 3/4 miles

Time of day, 1.30 P.M.; of tide,

State of sky, Clear.

Temperature of air, 67.

" surface of water, 64 (N<sub>o</sub>. 4640.)

" at depth of 5 fathoms, 62 (N<sub>o</sub>. 4640.)

" of bottom, 62 "

Depth, in fathoms, 19.

Nature of bottom, Shell.

Direction of ~~surface current~~, ~~air~~ N.

Force of ~~surface current~~, " 2

Direction of ~~bottom current~~, Drift - N.

Force of ~~bottom current~~, " 3 fm.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

887 Spec. C.

**REMARKS.**

Like form of  
Echinocystinium but  
with a single stalk  
feels smooth to the  
fingers. Encrusting rock  
bottom  
Yellowish brown color

Frank.  
TEMPERATURE RECORD.

Instrument used, Negretti Zambra

Current number of observation, 880.

Date, Sept. 21, 1860.

Locality, off Block I.

Bearings, South Light Block I,  
N. by E., 6 miles.

Time of day, 2 P.M., ; of tide.

State of sky, clear.

Temperature of air, 68

" surface of water, 64 (N. 46402

" at depth of 5 fathoms, 62 (N. 46402

" of bottom, 62 "

Depth, in fathoms, 19.

Nature of bottom, Shell.

Direction of surface current, wind. N.

Force of surface current. " 3.

Direction of bottom current, drift N.

Force of bottom current. " 1 1/2 m.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

888 Finch.

**REMARKS.**

Same as last day, etc.

*Expedition*  
TEMPERATURE RECORD.

Instrument used, *Neglect* barometer

Current number of observation, 889.

Date, Sept. 21.

Locality, off Block I.

Bearings, South East Block I.

W. 44 S. 5 miles.

Time of day, 3.50 P.M.; of tide,

State of sky, clear.

Temperature of air, 68

" surface of water, 64 (N. 46402)

" at depth of 5 fathoms, 62 (N. 46400)

" of bottom, 61.5 "

Depth, in fathoms, 11.

Nature of bottom, rocky.

Direction of surface current, ~~lives~~ N.

Force of surface current, " 3.

Direction of bottom current, drift N. S. W.

Force of bottom current, "  $\frac{1}{2}$  m

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

## REMARKS.

Henry S. Johnson, Justice Releif.

*Stedje*

## TEMPERATURE RECORD.

Instrument used, *Refractometer*

Current number of observation, 890.

Date, Sept. 21, 1880.

Locality, Off Block I.

Bearings, South light Block I,  
N. 14° S. 4 3/4 miles.

Time of day, 4 P.M. of tide,

State of sky, Clear.

Temperature of air, 68.

" surface of water, 64. (N. 46 40.2)

" at depth of 5 fathoms, 62 (N. 46 40.0)

" of bottom, 61.5 (N. 46 40.0)

Depth, in fathoms, 11

Nature of bottom, Rocky.

Direction of surface current, Wind N.

Force of surface current, " 3

Direction of bottom current, Drift N. S. W.

Force of bottom current, " 1/2 m.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

## REMARKS.

1.  $\alpha \beta \gamma \delta \in \mathbb{R}$   $\alpha \neq 0$   $\alpha \beta \gamma \delta \neq 0$   $\alpha \beta \gamma \delta \in \mathbb{R}_+$

*Frank*  
TEMPERATURE RECORD.

Instrument used, Negretti Zambra

Current number of observation, 891.

Date, Oct. 2, 1850.

Locality, Atlantic

Bearings, Lat,  $39^{\circ} 46' N$   
Long,  $71^{\circ} 10' W$

Time of day, 6 a.m.; of tide,

State of sky, Clear

Temperature of air, 60

" surface of water, 67

" at depth of fathoms,

" of bottom,

Depth, in fathoms, Soundings line broke at 310 +,

Nature of bottom, mud.

Direction of surface current, wind N.E.

Force of surface current, " 3.

Direction of bottom current, drift N.

Force of bottom current, "  $1/2$  m.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

## REMARKS.

Off shore mud.

Not much variety, but  
a number of fine shells etc.  
Inaminiere, 3 species reported.

The sounding for No 392 -  
was 145 fms. walking and  
this is probably the depth  
of the bar also.

Can be confirmed  
by the following  
list by Dr. G. Green.

*Frank*  
TEMPERATURE RECORD.

Instrument used, *Negril* *of* *value*

Current number of observation, 892

Date, Oct. 2. 8 00

Locality, *Albante*,

Bearings, Lat.  $39^{\circ} 46' N$

Long.  $71^{\circ} 05' W.$

Time of day, 8,46 a.m.; of tide,

State of sky, *Clear*,

Temperature of air, 64.

" surface of water, 65.

" at depth of fathoms,

" of bottom, *Lost lead when at surface*

Depth, in fathoms, 487.

Nature of bottom,

Direction of surface current, *Wind N.E.*

Force of surface current, " 3,

Direction of bottom current, *Swift N.N.E.*

Force of bottom current, " 2 miles,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

## REMARKS.

St. Louis 2000 ft. -

Frank  
TEMPERATURE RECORD.

Instrument used,

Mercurial Therm.

Current number of observation,

893

Date, Oct. 2, 1880,

Locality, Atlantic

Bearings, Lat.  $39^{\circ} 52' 20''$  N  
Long.  $70^{\circ} 58' W$ .

Time of day, 11, 23 a.m. of tide,

State of sky, Clear

Temperature of air, 63

" surface of water, 64

" at depth of fathoms,

" of bottom, 40, m. e.

Depth, in fathoms, 372

Nature of bottom, mud.

Direction of surface current, wind N.E.,

Force of surface current, " 3

Direction of bottom current, drift N.

Force of bottom current, " 1 mile

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

## REMARKS.

thin limestone slopes  
 Very Rich.  
 Cleared out  
 Some debris  
 in the bed.  
 Archæol?

Time of deposit of bed  
 in following sequence -  
 1. Limestone, 4' 0" -  
 46, 47, 48, 49, 50, 51, 52, 53,  
 54, 55, 56, 57, 58, 59, 60

Frank  
TEMPERATURE RECORD.

Instrument used,

Keller Cavelier

Current number of observation,

894

Date, Oct. 2, 1880

Locality, Allandie,

Bearings, Lat.  $39^{\circ} 23' N$

Long.  $70^{\circ} 58' 30'' W.$

Time of day, 1.10 P.M.; of tide,

State of sky, Clear

Temperature of air, 63.

" surface of water, 64.

" at depth of fathoms,

" of bottom, 40. m.c.

Depth, in fathoms, 365.

Nature of bottom, Sand

Direction of surface current, Wind N.E.,

Force of surface current, " 3

Direction of bottom current, drift N.,

Force of bottom current, 2 m.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

Long. by observation

## REMARKS.

Milk and double cream  
being Rich.

Frank  
TEMPERATURE RECORD.

Instrument used, Miller Casella  
Current number of observation, 894  
Date, Oct. 2, 1880  
Locality, Altantic  
Bearings, Lat  $39^{\circ} 36' 3''$  N  
Long.  $70^{\circ} 59' 45''$  W  
Time of day, 3.17 P.M.; of tide,  
State of sky, Clear  
Temperature of air, 62  
" surface of water, 65  
" at depth of fathoms,  
" of bottom, 42 He,  
Depth, in fathoms, 238  
Nature of bottom, Rock  
Direction of surface current, Wind N. W.  
Force of surface current, " 4,  
Direction of bottom current, Wind N.  
8 knot  
Force of bottom current, 1 1/2 knot  
Name of vessel,  
To what service attached,  
Name and rank of commanding officer,  
Name and position of observer,  
Long. by a thermometer

## REMARKS.

difficult about 2 tons.  
Billiard ball.  
Gordons, smooth, fine  
grained, yellowish.  
Woods, light.  
Sandstone, white  
very Rich

*Travel*  
TEMPERATURE RECORD.

Instrument used,

896.

Current number of observation,

Date, Nov. 16, 1880.

Locality,

Bearings, Lat.  $37^{\circ} 26' N.$   
Long.  $74^{\circ} 0' W.$  (19)

Time of day, ; of tide,

State of sky,

Temperature of air,

" surface of water,

" at depth of fathoms,

" of bottom,

Depth, in fathoms, 56.

Nature of bottom, sand, shells.

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

## REMARKS.

*Frank*  
TEMPERATURE RECORD.

Instrument used,

Current number of observation, 897.

Date, Nov. 16, 1880.

Locality,

Bearings, Lat.  $37^{\circ} 25' N$   
long.  $74^{\circ} 18' W.$

Time of day, ; of tide,

State of sky,

Temperature of air,

" surface of water,

" at depth of fathoms,

" of bottom,

Depth, in fathoms, 15  $\frac{1}{2}$

Nature of bottom, Sand, much!

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

## REMARKS.

*Frank*  
**TEMPERATURE RECORD.**

Instrument used,

Current number of observation,

*898.*

Date, *Nov. 16, 1880.*

Locality,

Bearings, *Lat. 37° 24' N.*  
*Long. 24° 17' W.*

Time of day, ; of tide,

State of sky,

Temperature of air,

" surface of water,

" at depth of fathoms,

" of bottom,

Depth, in fathoms,

*3 or 4 fathoms?*

Nature of bottom,

*Rocky.*

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

## REMARKS.

*caud.*  
**TEMPERATURE RECORD.**

Instrument used,

Current number of observation, 899.

Date, Nov. 16, 1880,

Locality,

Bearings, Lat.  $37^{\circ} 22' N.$   
Long.  $74^{\circ} 29' W.$

Time of day, ; of tide,

State of sky,

Temperature of air,

" surface of water,

" at depth of fathoms,

" of bottom,

Depth, in fathoms, 57 1/2

Nature of bottom, Bottom,

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

## REMARKS.

*Trawl*  
**TEMPERATURE RECORD.**

Instrument used,

Current number of observation, 900,

Date, Nov. 16, 1880,

Locality,

Bearings, Lat.  $37^{\circ}19' N$   
Long.  $74^{\circ}41' W$ .

Time of day, ; of tide,

State of sky,

Temperature of air,

" surface of water,

" at depth of fathoms,

" of bottom,

Depth, in fathoms, 31.

Nature of bottom, Sand!

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

## **REMARKS.**

*Frank*,  
TEMPERATURE RECORD.

Instrument used.

Current number of observation, 901.

Date, Nov. 16, 1880.

Locality,

Bearings, Lat.  $37^{\circ} 10' N$   
long  $75^{\circ} 08' W$ ,

Time of day, ; of tide,

State of sky,

Temperature of air,

" surface of water,

" at depth of fathoms,

" of bottom,

Depth, in fathoms, 18,

Nature of bottom, sand.

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

## REMARKS.